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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
HOFFMAN, BRANDON S	
ART UNIT	**PAPER NUMBER**
2136	

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/771,734	GANAPATHY, NARAYANAN	
	Examiner	Art Unit	
	Brandon Hoffman	2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 February 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-34 are pending in this office action.

2. Applicant's arguments, filed February 14, 2005, have been fully considered but they are not persuasive.

Rejections

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

4. Claims 1, 2, 5-15, and 20-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Bruno et al. (U.S. Patent No. 6,604,123).

Regarding claim 1, Bruno et al. teaches a system to facilitate substantially secure communication, comprising: a communication component operative to store an outgoing message received directly from an associated process, the outgoing message including a message key having a key value, an attribute being associated with the communication component, the attribute having selectable **attribute** conditions that are inaccessible by the associated process; and a filter associated with the communication component, the filter controlling sending the stored outgoing message from the communication component based on the key value of the outgoing message and **one of**

the attribute conditions (fig. 2, ref. num 222 and col. 5, line 30 through col. 6, line 33 and fig. 4 and fig. 5).

Regarding claim 2, Bruno et al. teaches wherein the communication component further comprises at least one storage device operative to store messages (the Examiner believes it to be inherent that there is a storage device).

Regarding claim 5, Bruno et al. teaches wherein the message key corresponds to a key associated with another communication component that is associated with a desired destination (col. 7, lines 23-54).

Regarding claim 6, Bruno et al. teaches wherein the message key is a multi-bit field for storing data identifying a key associated with a destination communication component (fig. 2, ref. num 212 and 222).

Regarding claim 7, Bruno et al. teaches wherein the filter is operative to prevent sending the outgoing message from the communication component upon detecting an invalid message key in the outgoing message (col. 7, lines 23-25).

Regarding claim 8, Bruno et al. teaches wherein key data having a range of at least one key value is associated with the communication component, the key data being inaccessible by the associated process, the filter controlling transmission of the outgoing message based on the validation of the message key as a function of **one of**

the attribute conditions and the range of at least one key value (fig. 2, ref. num 212 and 222 and col. 5, lines 33-55).

Regarding claim 9, Bruno et al. teaches wherein the filter employs the attribute to define a valid range of at least one key value based on the at least one key value associated with the communication component, such that the filter provides different control in connection with a message having a message key within the valid range and a message having a message key outside the valid range (col. 5, lines 30-37).

Regarding claim 10, Bruno et al. teaches wherein the key data identifies a plurality of key values (col. 5, lines 49-55).

Regarding claim 11, Bruno et al. teaches wherein the filter is operative to permit whether a message having a message key in the valid range is sent from the communication component (col. 7, lines 25-54).

Regarding claim 12, Bruno et al. teaches a system to facilitate substantially secure communication between at least two processes, comprising: a first queue operative to store a request received directly from a first of the at least two processes and, upon validation of the stored request, to send the stored request to a second of the at least two processes, the stored request including a destination address and a key having a key value; and an interface operative to validate the stored request based on the key value of the stored request relative to at least one predetermined key value

associated with the first queue, the at least one key value associated with the first queue being unavailable to the first process (fig. 2, ref. num 222 and col. 5, line 30 through col. 6, line 33).

Regarding claim 13, Bruno et al. teaches further comprising an attribute associated with the first queue, the attribute defining a valid range of key values based on the at least one key value associated with the first queue to control sending stored requests from the first queue (col. 5, lines 30-37).

Regarding claim 14, Bruno et al. teaches wherein the attribute has selectable **attribute** conditions that are unavailable to the first process and the valid range of message keys varies as a function of the attribute conditions and the at least one key value associated with the first queue (col. 5, lines 37-55).

Regarding claim 15, Bruno et al. teaches wherein the at least one key value associated with the first queue further comprises a plurality of key values associated with the first queue and unavailable to the first process (col. 5, lines 49-55).

Regarding claim 20, Bruno et al. teaches wherein the interface is operative to prevent sending the request from the first queue if the request includes an invalid key (col. 7, lines 23-25).

Regarding claims 21, 28, and 34, Bruno et al. teaches a system/method/computer readable medium to facilitate substantially secure communication between at least two user-level processes, comprising: storage means for storing an outgoing message received from a first of the at least two processes, the outgoing message including a message key associated with a destination, an attribute being associated with the storage means, the attribute having selectable **attribute** conditions unavailable to user-level processes; and control means for controlling sending of the stored outgoing message from the storage means based on the message key and **one of** the attribute conditions (fig. 2, ref. num 222 and col. 5, line 30 through col. 6, line 33).

Regarding claim 22, Bruno et al. teaches further comprising validation data associated with the storage means and unavailable to user-level processes, the control means controlling sending of the outgoing message based on the validation of the message key as a function of the attribute and validation data (col. 5, lines 49-55).

Regarding claim 23, Bruno et al. teaches wherein the validation data comprises at least one key value (col. 5, lines 33-37).

Regarding claim 24, Bruno et al. teaches wherein control means is operative to control whether the stored message can be sent from the storage means based on the message key relative to a valid range of key values, which varies as a function of **one of** the attribute conditions and the validation data (col. 7, lines 23-54).

Regarding claims 25 and 29, Bruno et al. teaches a system/computer readable medium to facilitate substantially secure communication between at least two user-level processes, comprising: storage means for storing a request received directly from a first of the at least two processes and, upon validation of the stored request, for sending the stored request to a second of the at least two processes, the stored request including a key having a key value; and validation means for validating the stored request based on the key value of the stored request relative to at least one predetermined key value associated with the storage means, the at least one key value associated with the storage means being unavailable to user-level processes (fig. 2, ref. num 222 and col. 5, line 30 through col. 6, line 33).

Regarding claim 26, Bruno et al. teaches further comprising an attribute associated with the storage means, the attribute defining a valid range of key values based on the at least one key value associated with the storage means, the validation means controlling sending stored requests from the storage means according to the valid range of key values (col. 5, lines 30-37).

Regarding claim 27, Bruno et al. teaches wherein the attribute has selectable **attribute** conditions that are not available to user-level processes, the valid range of key values varying as a function of the attribute conditions and the at least one key value associated with the storage means (col. 5, lines 37-55).

Regarding claim 30, Bruno et al. teaches a method to facilitate substantially secure communication from a first user-level process in a system in which the first process is operable to communicate directly with hardware, comprising: storing an outgoing message received directly from the first process in an associated storage device, the outgoing message including a message key having a key value; and controlling sending of the stored message to a second process based on the value of the message key relative to a predetermined at least one key value associated with the storage device, the at least one key value associated with the storage device being unavailable to the first process (fig. 2, ref. num 222 and col. 5, line 30 through col. 6, line 33).

Regarding claim 31, Bruno et al. teaches further comprising associating an attribute with the storage device that is operable to define a valid range of key values based on the at least one key value associated with the storage device, and controlling sending of the stored message from the storage device based on the message key thereof and the defined valid range of key values (col. 5, lines 30-37).

Regarding claim 32, Bruno et al. teaches wherein the attribute has selectable **attribute** conditions not available to the first process, the valid range of key values varying as a function of the attribute conditions and the at least one key value associated with the storage device (col. 5, lines 37-55).

Regarding claim 33, Bruno et al. teaches further comprising validating the message key relative to the at least one key value associated with the storage device, and, upon detecting an invalid message key, preventing the stored message from being sent from the storage device (col. 7, lines 23-25).

Claim Rejections - 35 USC § 103

5. Claims 3, 4, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruno et al. (USPN '123) in view of Neal et al. (U.S. Patent No. 6,766,467).

Regarding claim 3, Bruno et al. teaches all the limitations of claims 1 and 2, above. However, Bruno et al. does not teach wherein the **at least one** storage device further comprises at least one queue operative to store messages being sent by the associated process.

Neal et al. teaches wherein the **at least one** storage device further comprises at least one queue operative to store messages being sent by the associated process (fig. 6, ref. num 620).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine the storage device containing at least one queue to store outgoing messages, as taught by Neal et al., with the system of Bruno et al. It would have been obvious for such modifications because storage allows multiple messages to be prepared for sending.

Regarding claim 4, the combination of Bruno et al. in view of Neal et al. teaches wherein the at least one queue further comprises at least two queues, one of the at least two queues being operative to store messages being sent by the associated process and another of the at least two queues being operative to store messages being sent to the associated process (see fig. 6, ref. num 624 and 626 of Neal et al.).

Regarding claim 16, Bruno et al. teaches all the limitations of claims 12-14, above. However, Bruno et al. does not teach wherein the attribute is set to have one of at least a first condition and a second condition.

Neal et al. teaches wherein the attribute is set to have one of at least a first condition and a second condition (col. 9, line 45 through col. 10, line 34).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine an attribute with at least two conditions, as taught by Neal et al., with the system of Bruno et al. It would have been obvious for such modifications because the two conditions provide a selection of either working or not working.

Regarding claims 17 and 19, the combination of Bruno et al. in view of Neal et al. teaches wherein the interface is operative to prevent the stored request from being sent from the first queue if the attribute has the [first/second] condition and the key has a value that agrees with the at least one key value associated with the first queue (see

col. 7, lines 25-54 of Bruno et al., it doesn't matter what the attribute condition is, even though it is unavailable by the first process, as long as the keys agree, data is prevented from being sent).

Regarding claim 18, the combination of Bruno et al. in view of Neal et al. teaches wherein the interface is operative to permit the stored request from being sent from the first queue if the attribute has the first condition and the key has a value that disagrees with the at least one key value associated with the first queue (see col. 7, lines 25-54 of Bruno et al.).

Response to Arguments

6. Applicant amends claims 1, 3, 4, 8, 14, 15, 17-19, 21, 24, 27, 28, 32, and 34.

7. Applicant argues:

a. Bruno et al. does not teach the limitation "an attribute having selectable attribute conditions ... that are inaccessible by the associated process" (page 12, last paragraph through page 13, first paragraph).

b. Bruno et al. does not teach the limitation "a first queue operative to store a request received directly from a first of the at least two processes ... validation of the stored request ... the stored request includes a destination address and a key having a key value" (page 13, second paragraph).

c. Bruno et al. does not teach the limitation "storage means for storing a request received directly from a first of the at least two processes ... the at least

one key value associated with the storage means being unavailable to user-level processes" (page 13, third paragraph).

d. The dependent claims are allowable based on their dependency on the independent claims (page 13, last paragraph through page 14, first paragraph).

Regarding argument (a), examiner disagrees with applicant. The operation is inaccessible by the associated process because the queue (318) is in the nucleus, which is inaccessible, whereas the communication context (312) is in the user-level, which is accessible (see col. 6, lines 40-44 of Bruno et al.). The limitation of an attribute having selectable attribute conditions is newly added and therefore a new ground of rejection was made.

Regarding argument (b), examiner disagrees with applicant. The validation means are performed with help by the name server, who checks access restrictions and if access is approved the server information is given to the client (see col. 7, lines 23-33 of Bruno et al.). The storage means for receiving a message provided directly from a user-level process remains on the client or server. It is well known that clients and servers have storage means.

Regarding argument (c), examiner disagrees with applicant. Similar to argument (b), above, the storage means stores a request from a first of at least two processes. The operation is unavailable to user-level processes because the queue (318) is in the nucleus, which is unavailable, whereas the communication context (312) is in the user-level, which is available (see col. 6, lines 40-44 of Bruno et al.).

Regarding argument (d), examiner disagrees with applicant. Based on the arguments set forth by the examiner for arguments (a)-(c), above, the dependent claims stand as rejected.

Conclusion

8. Applicant's amendment necessitated the new ground of rejection. Accordingly, **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon Hoffman whose telephone number is 571-272-3863. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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